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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,573	08/29/2001	Jean-Marie Stawikowski	213288US6X	5002

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EXAMINER	
ZHONG, CHAD	
ART UNIT	**PAPER NUMBER**
2152	

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/940,573	STAWIKOWSKI, JEAN-MARIE	
	Examiner	Art Unit	
	Chad Zhong	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *25-55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *25-55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 11/29/01
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

OFFICE ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/05/2005 has been entered.

2. Applicant is required to update the status (pending, allowed, etc.) of all parent priority applications in the first line of the specification. The status of all citations of US filed applications in the specification should also be updated where appropriate.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 25-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linderman, US 2002/0032790, in view of Applicant Admitted Prior Art (hereinafter AAPA).

5. As per claim 25, Linderman a communication system including:

automation equipment ([0013], wherein the automation equipment is for example, the server) having at least one processing unit configured to execute at least one automation program ([0013], [0026], wherein the server has programs controllable by the remote devices) and at least one web service, said automation equipment including a building automation logic controller for a building (examiner will

interpret 'building automation equipment' as network communications solutions comprising repeaters, gateways, routers, and I/O; in the instant case, Linderman teaches building automation equipment on '045, P002, 3rd paragraph, where DaberNet controls server, a switch or any number of other devices such as network printers and fax machines, or a host of emerging 'smart products'; additionally, applicant admitted pg 1, lines 1-15 of the specification as the background, thus, building automation equipment is interpreted as prior art hereinafter), said automation program configured to provide an automation function and said web service configured to provide a remote access to the automation function and said automation function including a building automation function for the building (Linderman '045, P003, 1st paragraph, RPC – Remote Procedure Call – is a automation function done on behalf of the requesting equipment);

remote equipment configured to communicate with the automation equipment over an IP network ([0013]);

a computer application configured to execute on the remote equipment and to communicate with the at least one web service to provide a remote automation function to the remote equipment, said remote automation function including at least one of monitoring, display, control, configuration, and programming of the automation function provided by the automation program on the automation equipment using the remote access of the web service ([0049]; T-Box, Fig 1); and

said remote automation function being based on at least one service description document configured to describe capabilities of the at least one web service (wherein the description is being done in SOAP protocol)

However, Linderman does not explicitly teach using a WSDL (Web Services Description Language) language to describe web services.

AAPA teaches using a WSDL (Web Services Description Language) language to describe web services (see for example, specification, pg 4, lines 25-30; pg 5, lines 23-24; pg 6, lines 10-18, wherein

SOAP and WSDL are compatibly conformed with each other and complements as well as extend each other to give enhanced web services experience), in order to facilitate interoperability of WEB services, further, with WSDL, applications that use the SOAP protocol are capable of automating exchanges between WEB services, while concealing most low level technical details (AAPA, see for example, pg 6, lines 10-18).

It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Linderman and AAPA in order to facilitate interoperability of WEB services, further, with WSDL, applications that use the SOAP protocol are capable of automating exchanges between WEB services, while concealing most low level technical details

7. As per claim 26, Linderman – AAPA disclose the invention substantially as rejected in claim 25 above, including the service description document is accessible to remote equipment through a URL, URL or IP address through an IP network interface ([0028-0030], [0040], [0049], wherein the user transmits service requests remotely to a server in order to carry out the request, the command comprises of node address or the IP address in the network).

8. As per claim 27, Linderman – AAPA disclose the invention substantially as rejected in claim 26 above, including the at least one web service is configured to receive and send messages encoded according to at least one communication protocol that conforms to at least one WSDL binding described in the at least one service description document on the IP network ([0019], [0032], [0033], wherein encoding is done in XML/SOAP, which conforms with WSDL binding).

9. As per claim 28, Linderman – AAPA disclose the invention substantially as rejected in claim 27 above, including the at least one WSDL binding described in the at least one service description

document conforms to at least one of SOAP, HTTP and MIME protocol ([0019], [0032], [0033], wherein encoding is done in XML/SOAP, which conforms with WSDL binding).

10. As per claim 29, Linderman – AAPA disclose the invention substantially as rejected in claim 28 above, including the at least one service description document includes a description of a capacity of the at least one web service according to at least one communication protocol of the automation equipment ([0028-0030], [0040], [0049], wherein the user transmits service requests remotely to a server in order to carry out the request, one exemplary embodiment would be capacity controlling of the remote automation equipment, the capacity information are carried in the messages inorder to control remote capacity, the indication of the availability of capacity is inherently taught here).

11. As per claim 30, Linderman – AAPA disclose the invention substantially as rejected in claim 27 above, including the at least one WSDL binding described in the at least one service description document conforms to at least one communication protocol of the automation equipment ([0019], [0032], [0033], wherein encoding is done in XML/SOAP, which conforms with WSDL binding).

12. As per claim 31, Linderman – AAPA disclose the invention substantially as rejected in claim 27 above, including the at least one WSDL binding described in the at least one service description document conforms to at least one version of the SOAP protocol encoded in a binary format ([0019], [0032], [0033], wherein encoding is done in XML/SOAP, which conforms with WSDL binding).

13. As per claim 32, Linderman – AAPA disclose the invention substantially as rejected in claim 25 above, including the remote equipment further comprises a remote local storage configured to memorize the at least one service description document ([0034]; [0045]; further, note that commands are within memory of a system at one point or another prior to execution by the processor).

14. As per claim 33, Linderman – AAPA disclose the invention substantially as rejected in claim 26 above, including the automation equipment further comprises an automation equipment local storage configured to memorize the at least one service description document ([0034]; [0045]; further, note that commands are within memory of a system at one point or another prior to execution by the processor).

15. As per claim 34, Linderman – AAPA disclose the invention substantially as rejected in claim 26 above, including intermediate equipment operatively connected to the automation equipment and the remote equipment, said intermediate equipment including an intermediate local storage configured to memorize the at least one service description document ([0040]; [0045]).

16. As per claim 35, Linderman – AAPA disclose the invention substantially as rejected in claim 26 above, including a server operatively connected to the IP network and including a server local storage configured to memorize the at least one service description document ([0032]).

17. As per claim 36, Linderman – AAPA disclose the invention substantially as rejected in claim 26 above, including a service description document generator configured to dynamically build the at least one service description document based on a request from the remote equipment and accessible to the remote equipment through an URL, URI or IP address through the IP network interface ([0032], the service description document is generated at the server and routed to proper remote service equipment).

18. As per claim 37, Linderman – AAPA disclose the invention substantially as rejected in claim 27 above, including the at least one web service is configured to interact with the automation program in the automation equipment and is installed in the automation equipment ([0040], [0043], [0049], wherein the remote services is running on the automation equipment, i.e. bandwidth capacity allocation service, the remote equipment is capable of interactions with the automation equipment).

19. As per claim 38, Linderman – AAPA disclose the invention substantially as rejected in claim 27 above, including intermediate equipment operatively connected to the automation equipment and the remote equipment ([0040]; [0045]), said intermediate equipment including at least one web service configured to interact with the automation program in the automation equipment ([0032], further interaction between the intermediary server and the automation equipment).

20. As per claim 39, Linderman – AAPA disclose the invention substantially as rejected in claim 28 above, including the at least one web service is configured to receive and send requests encoded according to at least one protocol of the automation equipment ([0032]).

21. As per claim 40, Linderman – AAPA disclose the invention substantially as rejected in claim 26 above, including the remote equipment is configured to access a discovery document for the at least one service description document through an URL, URI or IP address ([0028-0030], [0040], [0049], wherein the user transmits service requests remotely to a server in order to carry out the request, the command comprises of node address or the IP address in the network).

22. As per claim 41, Linderman – AAPA disclose the invention substantially as rejected in claim 40 above, including the discovery document for the service description document is represented by at least one web page that conforms to at least one web page description language (wherein SOAP/XML is a description language), and the discovery document includes at least one list of URL URI or IP addresses for the at least one service description document. ([0028-0030], [0040], [0049], wherein the user transmits service requests remotely to a server in order to carry out the request, the command comprises of node address or the IP address in the network).

23. As per claim 42, Linderman – AAPA disclose the invention substantially as rejected in claim 40 above, including a format of the discovery document of the at least one service description document

conforms to at least one of ADS (Advertisement and Discovery Services), DISCO (Discovery), and UDDI (Universal Description, Discovery and Integration) specifications (AAPA, see for example, specification, pg 6, lines 19-23, in order to complement the universal directory that stores document references describing the capabilities of WEB services).

24. As per claim 43, Linderman – AAPA disclose the invention substantially as rejected in claim 40 above, including the automation equipment further comprises a storage device configured to memorize the discovery document for the at least one service description document ([0032]; [0040]; [0045]).

25. As per claim 44-45, claims 44-45 are rejected for the same reasons as rejection to claims 34-35 above respectively.

26. As per claim 46, Linderman – AAPA disclose the invention substantially as rejected in claim 25 above, including the automation equipment includes at least one of a programmable logic controller, a numeric controller, an instrumentation station, and a control station ([0049], wherein the bandwidth can be controlled remotely and dynamically, thus the control aspect is inherently present).

27. As per claim 47, Linderman – AAPA disclose the invention substantially as rejected in claim 25 above, including the automation function includes at least one of an industrial control function, a building automation equipment function, an instrumentation for electrical distribution networks function, and a control for electrical distribution networks function (see for example, [0049], wherein the bandwidth can be controlled remotely and dynamically, thus the control aspect is inherently present).

28. As per claim 48, claim 48 is rejected for the same reasons as rejection to claim 25 above.

29. As per claim 49, Linderman – AAPA disclose the invention substantially as rejected in claim 48 above, including:

sending a request on the IP network from at least one of the computer application and a development application executing on the remote equipment to receive the at least one service description document ([0028-0032]);

generating at least a part of the computer application based on the at least one service description document using a code generator ([0032]); and

transmitting messages between the computer application and the at least one web service according to a capability of the at least one web service described in the at least one service description document ([0049], [0045], wherein capacity is one example of the services that can be adjusted through out the SOAP/XML/WSDL scheme).

30. As per claim 50, Linderman – AAPA disclose the invention substantially as rejected in claim 49 above, including the sending a request further comprises using at least one discovery documents to receive the at least one service description document ([0018-0019], wherein XML is a service description document).

31. As per claim 51, Linderman – AAPA disclose the invention substantially as rejected in claim 49 above, including the generating further comprises generating at least part of the computer application using a code generator executing on at least one of the remote equipment and a second remote equipment operatively connected to the automation equipment and the remote equipment by the IP network ([0032]).

32. As per claim 52, Linderman – AAPA disclose the invention substantially as rejected in claim 48 above, including the automation equipment includes at least one of a programmable logic controller, a numeric controller, an instrumentation station, and a control station ([0049]).

33. As per claim 53, Linderman – AAPA disclose the invention substantially as rejected in claim 48 above, including the automation function includes at least one of an industrial control function, a building

automation equipment function, an instrumentation for electrical distribution networks function, and a control for electrical distribution networks function ([0049]).

34. As per claim 54, Linderman – AAPA discloses invention substantially as rejected in claim 25 above, including a communication system including:

automation equipment ([0013], wherein the automation equipment is for example, the server) having at least one processing unit configured to execute at least one automation program ([0013], [0026], wherein the server has programs controllable by the remote devices) and at least one web service, said automation equipment including an industrial automation logic controller for industrial equipment (examiner will interpret 'industrial automation logic' as network communications solutions comprising repeaters, gateways, routers, and I/O; in the instant case, Linderman teaches building automation equipment on '045, P002, 3rd paragraph, where DaberNet controls server, a switch or any number of other devices such as network printers and fax machines, or a host of emerging 'smart products'), said automation program configured to provide an automation function, said web service configured to provide a remote access to the automation function and said automation function including an industrial equipment automation function for the industrial equipment (Linderman '045, P003, 1st paragraph, RPC – Remote Procedure Call – is a automation function done on behalf of the requesting equipment);

remote equipment configured to communicate with the automation equipment over an IP network ([0013]);

a computer application configured to execute on the remote equipment and to communicate with the at least one web service to provide a remote automation function to the remote equipment, said remote automation function including at least one of monitoring, display, control, configuration, and programming of the automation function provided by the automation program on the automation equipment using the remote access of the web service ([0049]; T-Box, Fig 1); and

The remainder of claim 54 is rejected for the same reasons as rejection to claim 25 above.

35. As per claim 55, the claim is rejected for the same reasons as rejection to claim 54 above.

Response to Arguments

36. Applicant's remarks filed 12/05/2005 have been considered but are found not persuasive in view at the new grounds of rejection necessitated by Applicant's amendment.

37. In the remark, the applicant argued in substance that Linderman – AAPA fails to disclose or suggest:

a) automation equipment... configured to execute at least one automation program and at least one web service.

b) a computer application configured to... provide a remote automation function... including at least one of monitoring, display, control, configuration, and programming of automation function.

c) building automation logic controller for a building and an automation function that includes a building automation function for the building

In response to applicant's remarks:

a) the automation equipment, i.e. the server in [0013] is accepting RPC calls from remote devices in a network. The server is providing a web based service to remote clients ([0013], [0026]).

b) the computer application is running on the server side, server side applications provide services on behalf of the requesting clients, PRC call realizes the programming of automation function. Additionally, Linderman provide means to adjust bandwidth availability remotely, realizing programming of automation function.

c) 'building automation equipment' was not further defined by the specification, thus, examiner will interpret 'building automation equipment' as network communication apparatus such as repeaters, gateways, routers, and I/O. Furthermore, Applicant admitted prior art suggests building automation

equipment as previously implemented technology, thus, examiner will interpret the building automation equipment as prior art. In the instant case, Linderman teaches building automation equipment on '045, P002, 3rd paragraph, where DaberNet controls server, a switch or any number of other devices such as network printers and fax machines, or a host of emerging 'smart products'

38. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to "Communication System For Automation Equipment Based On The WSDL Language".

i. US 6,282,454 Papadopoulos

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Zhong whose telephone number is (571)272-3946. The examiner can normally be reached on M-F 7:15 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAROENCHONWANIT, BUNJOB can be reached on (571)272-3913. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CZ
February 28, 2006

BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER